IN THE CLAIMS:

The listing of claims will replace all prior versions, and listing, of claims in the application.

Claim 1. (Previously Presented) A process for the continuous preparation of thermoplastic polyurethane elastomers in which

one or more polyisocyanates (A) and

a mixture (B), with Zerewitinoff-active hydrogen atoms, comprising

B1) 1 to 85 equivalent-%, with respect to the isocyanate groups in (A), of one or more compounds with on average at least 1.8 Zerewitinoff-active hydrogen atoms and an average molecular weight M_n of 450 to 10000,

B2) 15 to 99 equivalent-% (with respect to the isocyanate groups in (A)) of one or more chain lengthening agents with an average at least 1.8 Zerewitinoff-active hydrogen atoms and a molecular weight of 60 to 400, and

0-20 wt.%, with respect to the total amount of TPU, of further auxiliary agents and additives (C)

are continuously introduced and reacted in a static mixer, said thermoplastic polyurethane elastomer being formed within said static mixer, and said process having a residence time within said static mixer of less than 5 seconds, wherein the difference between the temperatures of components (A) and (B), before entering said static mixer, is less than 20°C.

Claim 2. (Currently Amended) The process of Claim 1 wherein the temperature of components (A) and (B) before entrance to the ~~reactor~~ static mixer is between 60°C and 220°C.

Claim 3. (Cancelled).

Claim 4. (Previously Presented) The process of Claim 1 wherein the static

mixer has a length to diameter ratio in the range from 8:1 to 16:1.

Claim 5. (Cancelled).

Claim 6. (Cancelled).

Claim 7. (Previously Presented) Thermoplastic polyurethane elastomers prepared according to the process of Claim 1.

Claim 8. (Cancelled).

Claim 9. (Cancelled).

Claim 10. (Previously Presented) The process of Claim 1 wherein said residence time is less than 2.5 seconds.

Claim 11. (Previously Presented) The process of Claim 1 wherein said static mixer has a length to diameter ratio of 10:1 to 14:1.